February 11, 2021

TO: Shawn Bergeron, Chairman NH Building code Review Board

FROM: Kenneth Walsh, Chair – BCRB 2018 IECC Subcommittee

RE: Subcommittee Report – 2018 IECC

IECC Subcommittee Members:

Kenneth Walsh, NH PUC, BCRB Member, Chair IECC Subcommittee
Tedd Evans, Mechanical Licensing Board, BCRB Member, Member IECC Subcommittee
Lee F. Carroll, PE; Lee F. Carroll, PE Electrical Consultants, BCRB Member, Member IECC
Subcommittee

Chairman Bergeron:

IECC SUMMARY CONCLUSION:

The BCRB IECC Subcommittee respectfully submits Exhibit 1 and Exhibit 2 as the basis of analysis of the 2018 IECC vs. the 2015 edition. These documents validate the in-depth research and modeling along with an extensive vetting process. Therefore, we do not recommend any amendments to the proposed 2018 International Energy Conservation Code at this time.

IECC SUBCOMMITTEE STATEMENT:

We present to you our IECC Subcommittee Report in which our subcommittee was tasked with a review and analysis of the code changes from the 2015 International Energy Conservation Code to the 2018 International Energy Conservation Code (IECC).

I trust you and the other BCRB committee members understand the breadth and the challenge of performing a systematic and consistent review of the subject code while maintaining a focus on the impacts to construction costs and building resilience. While our subcommittee began in-depth analysis of the 2018 IECC vs. the 2015 edition, it became abundantly obvious the complexities of this code and the true need for higher level and available research and published data might be an avenue we as a subcommittee wished to examine. Having said this, our subcommittee researched other published documentation from the International Code Council (ICC) along with a report prepared for the U.S. Department of Energy (DOE) by the Pacific Northwest National Laboratory (PNNL). Our IECC Subcommittee will be referencing these documents as part and parcel of our report and therefore, will be submitted as exhibits.

More specifically and identified as Exhibit 1, we reference the "Complete Revision History to the 2018 I-Codes: Successful Changes with Public Comments", published by the International Code Council, Inc. This document, printed in November, 2017, represents the successful code

changes in the 2018 I-codes vs. the 2015 editions. Unsuccessful code changes were not included. As we know from the ICC process, the code development cycle involves an extensive vetting process as well as input from the public, the trades, manufacturers, and of course, code officials and governing bodies.

Our IECC subcommittee also submits Exhibit 2, and we reference the "Energy and Energy Cost Savings Analysis of the 2018 IECC for Commercial Buildings, December 2018", from the Pacific Northwest National Laboratory. This report was prepared to document work sponsored by an agency of the United States Government.

With reference to Exhibit 1, IECC contents will be found on pages 2293-2642, which is formatted for Part I Commercial and Part II Residential. Our task as a subcommittee is to identify code changes, which have already been well defined as found in the "Table of Contents" (PDF page 2297). This table provides the code section numbers, new and deleted sections, and the specific published material for each section. Of significance and not to be taken lightly, is the reasoning for the code change as well as the cost impact. Without this supporting documentation, it is far too easy for the reader of the stand-alone code to just interpret a cost increase to negate the value of the code change.

Through this vetting process with regard to Exhibit 1, the published material also includes the ICC Committee Action and comments that further validate the public process.

With reference to Exhibit 2, the PNNL report was prepared for the DOE Building energy Codes Program. Their analysis project had an extensive technical foundation and methodology assessment that included whether now buildings constructed to the 2018 IECC commercial provisions would save energy and energy costs as compared to the 2015 IECC. This PNNL report was essentially able to provide another "apples to apples" example base on their extensive us of building prototypes and climates zones. This document also provided another independent review of IECC code changes.

Respectfully,

KGW

Kenneth Walsh, Chair IECC Subcommittee